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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,944	05/24/2005	Peter Kammer	IBM-7434	5297

26294 7590 12/18/2006
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
1300 EAST NINTH STREET, SUITE 1700
CLEVEVLAND, OH 44114

EXAMINER

NGUYEN, DINH Q

ART UNIT	PAPER NUMBER
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3752

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/518,944

Applicant(s)

KAMMER, PETER

Examiner

Dinh Q. Nguyen

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/24/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitations: "the outlet opening" in line 2, "the outlet channel" in line 3, "the nozzle body" in line 4; Claim 2 recites the limitation: "the connection" in line 3; Claim 3 recites the limitation: "the connection" in line 3; Claim 5 recites the limitation: "the connection" in line 3; Claim 6 recites the limitation: "the material" in line 2; Claim 7 recites the limitation: "the melting range" in line 2; Claim 8 recites the limitations: "the holding force F" and "the connection" in line 2, "the force f" in line 3, "the pressure of the extinguishant" in line 4; Claim 9 recites the limitation: "the region of the outlet channel" in line 2; Claim 10 recites the limitation: "the region of the inlet channel" in line 2. There is insufficient antecedent basis for this limitation in the claims. The claims are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document. The claims appear to be a list of the elements of the invention without a clear explanation of each element's placement. Applicant is advised to completely review the claims for errors.

4. For the purpose of this Office action, the claims will be examined as best understood by the examiner.

Claim Rejections - 35 USC § 102

5. Claims 1, 2, 4, 5, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Werner as best understood by the examiner.

Werner discloses a closure that reacts to heat comprising: an outlet opening 22 an the end of an outlet channel 4, the outlet opening 22 is closed by a cover plate 19 that is firmly connected to the nozzle body 10/20 by means of a melting initiator 23, wherein the melting initiator 23 is a solder with a low melting point, a pin 18 touches the cover plate 19 that is arranged in the outlet channel 4 and the outlet opening 22, the pin 18 has a sealing element 15 locating in a region of an inlet channel 3, and the cover plate 19 and the pin are produced integrally.

6. Claims 1, 3-5, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Grenier as best understood by the examiner.

Grenier disclose a closure that reacts to heat comprising: an outlet opening 236 an the end of an outlet channel 238, the outlet opening 236 is closed by a cover plate 246 that is firmly connected to the nozzle body 242 by means of a melting initiator 260 with a low melting point, a pin 256 touches the cover plate 246 that is arranged in the outlet channel 238 and the outlet opening 236.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3752

8. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Werner or Grenier in view of Marsh.

Werner or Grenier teaches all the limitations of the claims except for the melting temperature range of the melting initiator is 50⁰ to 300⁰. However, Marsh discloses a closure that reacts to heat with melting initiator 52 that is melted at 260⁰ C (see column 4, line 20). Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Werner and Grenier with the melting initiator that has a melting range of 50⁰ to 300⁰ as suggested by Marsh. Doing so would provide an effective way to fight fire (see column 2, lines 14+).

With respect to claims 6 and 8, At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the device of Werner or Grenier with the maximum tolerance of 6⁰ C for the melting range of the melting initiator, or the holding force of the melting initiator is at least one and half times greater than the force of the fire extinguishant; because Application has not disclosed that the maximum tolerance of 6⁰ C for the melting range of the melting initiator, or the holding force of the melting initiator is at least one and half times greater than the force of the fire extinguishant provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either claimed dimensions or the Werner or Grenier dimensions. Therefore, it would have been an obvious matter of design choice to modify the device of Werner or Grenier to obtain the invention as specified in claims 6 and 8.

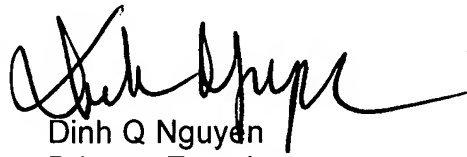
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to show the art with respect to a heat reacted closure: Juliano, Johnson, and Polan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q. Nguyen whose telephone number is 571-272-4907. The examiner can normally be reached on Monday-Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Dinh Q. Nguyen
Primary Examiner
Art Unit 3752